

From Research to Practice: Video Modeling and Autism

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I. Imitation in Development

- The ability to imitate is present in infants as young as 72 hours old (Meltzoff, 1983; 1999)
- Learning through observation allows infants and young children to acquire various skills
 - Play (McDuffie, Turner, Stone, et al., 2007)
 - Language (e.g., Bates, Thal, Whitesell, Fenson, & Oaks, 1989; Charman, Baron-Cohen, Swettenham, et al., 2000)
 - Social skills (Nadel & Peze, 1993; Trevarthen, Kokkinaki, & Fiamenghi, 1999)

II. Autism & Imitation

- Children with autism struggle to imitate from a young age (Meltzoff, Dawson)
- Lack of imitation is a salient diagnostic marker (Lord et al., 2000)
- More impaired imitation skills are associated with more severe symptoms of autism (Rogers et al., 2006)

III. Imitation Ability in Autism

- is associated with
 - Play skills
 - (Stone, Ousley, & Littleford, 1997; Ingersoll & Schreibman, 2006)
 - Language skills
 - (Dawson & Adams, 1984; Stone et al., 1997; Stone & Yoder, 2001; Charman et al., 2003; Toth, Munson, Meltzoff, & Dawson, 2006)
 - Social skills
 - (Abrahamsen & Mitchell, 1990; Stone & Lemanek, 1990; Carpenter, Pennington, & Rogers, 2002; Rogers et al., 2003; Ingersoll & Schreibman, 2006)

IV. Autism & Observational Learning (Bandura, 1977)

- Learning by watching
 - Also known as “Social Learning Theory”
 - Children with ASD struggle with observational learning (lack of imitation!)
- Video Modeling Facilitates Observational Learning
 - **Four Requirements**
 - *Attention to the model - Motor reproduction*

- *Retention of details* - *Motivation and opportunity*

V. What is Video Modeling?

- Video modeling has been used with children with autism for over a decade
- Mode of teaching that uses video recordings and display equipment to provide a visual model of a targeted behavior or skill
- Video modeling has been shown to be highly effective for children with autism
 - Evidence Based Practice – National Professional Development Center on ASD; EBP Report 2014
 - IES What Works Clearing House; Bellini & Akullian, 2007; National Autism Standards

VI. Types of Video Modeling

- Classic Video Modeling
- Point-of-View Video Modeling
 - Sometimes called Perspective
- Video Self-Modeling
 - Editing skills required (and patience!)

VII. Video Modeling Research

- Object
- Gestural
- Attention
- Caregiver
- Parameters (Preferences & Distractions)
- Agency/District Training

VIII. What we know about VM

[Wilson, K.P. (2013). Incorporating video modeling into a school-based intervention for students with Autism Spectrum Disorders. *Language, Speech, & Hearing Services in Schools*, 44, 105-117.]

1. Video modeling has produced positive effects in a variety of areas (e.g., functional skills, communication, social skills) in children with ASD in a variety of settings (e.g., home, clinic, school) (Ayres & Langone, 2005; Delano, 2007; Rayner, Denholm, & Sigafoos, 2009; Shukla-Mehta, Miller, & Callahan, 2010).

2. Skills gained through video modeling are often maintained and generalized (across settings, materials, and people) (Delano, 2007; Rayner et al., 2009).

3. Video modeling is a socially valid and noninvasive intervention procedure (Delano, 2007).

4. Video modeling has a high degree of practicality based on consistency, ease of use, and availability of technology (Delano, 2007).

5. A variety of model types have been used effectively in video modeling (Delano, 2007; Shukla-Mehta et al., 2010).

6. Some skills are suggested to facilitate greater success with video modeling (e.g., imitation, ability to attend) (Delano, 2007; Shukla-Mehta et al., 2010).

7. Repeated viewing of video models < 5 min in length is suggested to produce the greatest effects

IX. Tips & Strategies for VM

1. Don't be intimidated! Start somewhere!
2. Think of a skill you want a child to learn.
3. Video tape someone performing the skill.
4. Show the video to the child individually or in a group setting.
5. Prompt them if they don't do it after three tries.
6. Keep going

For a pdf of the Video Modeling manual that Dr. Cardon uses in her research studies, please e-mail a request to teresa.cardon@uvu.edu